

Network Storage System
90

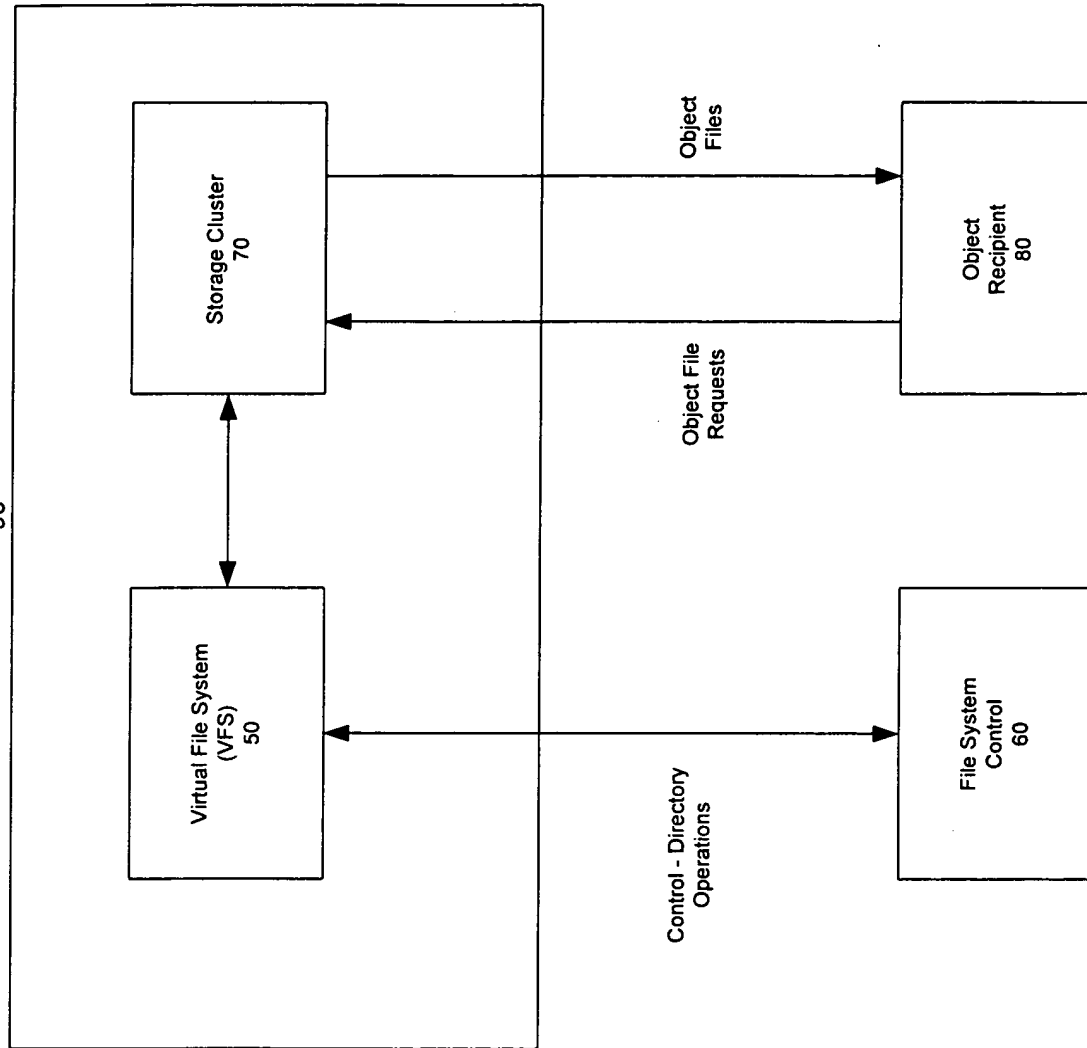


Figure 1

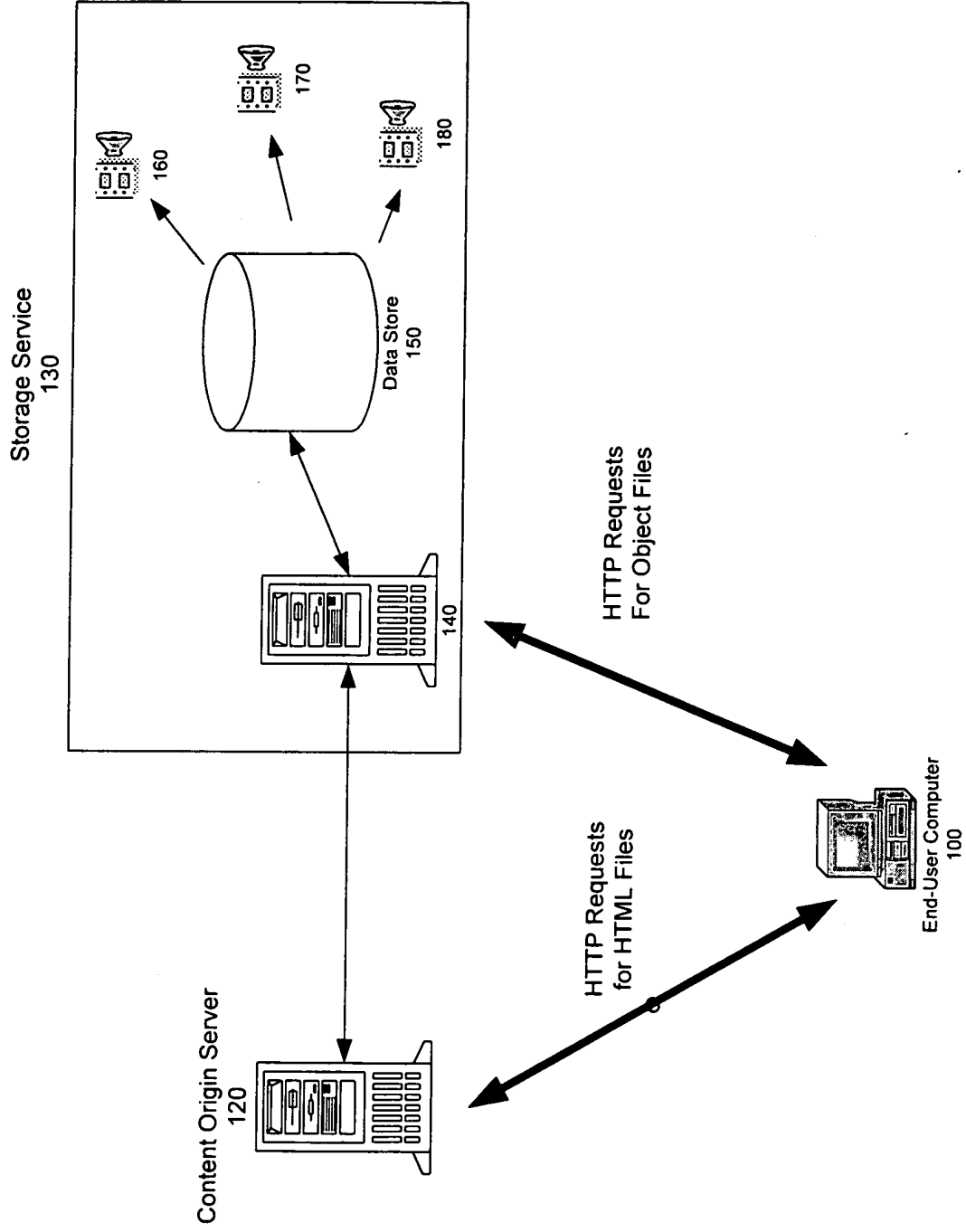


Figure 2

09753141-122900

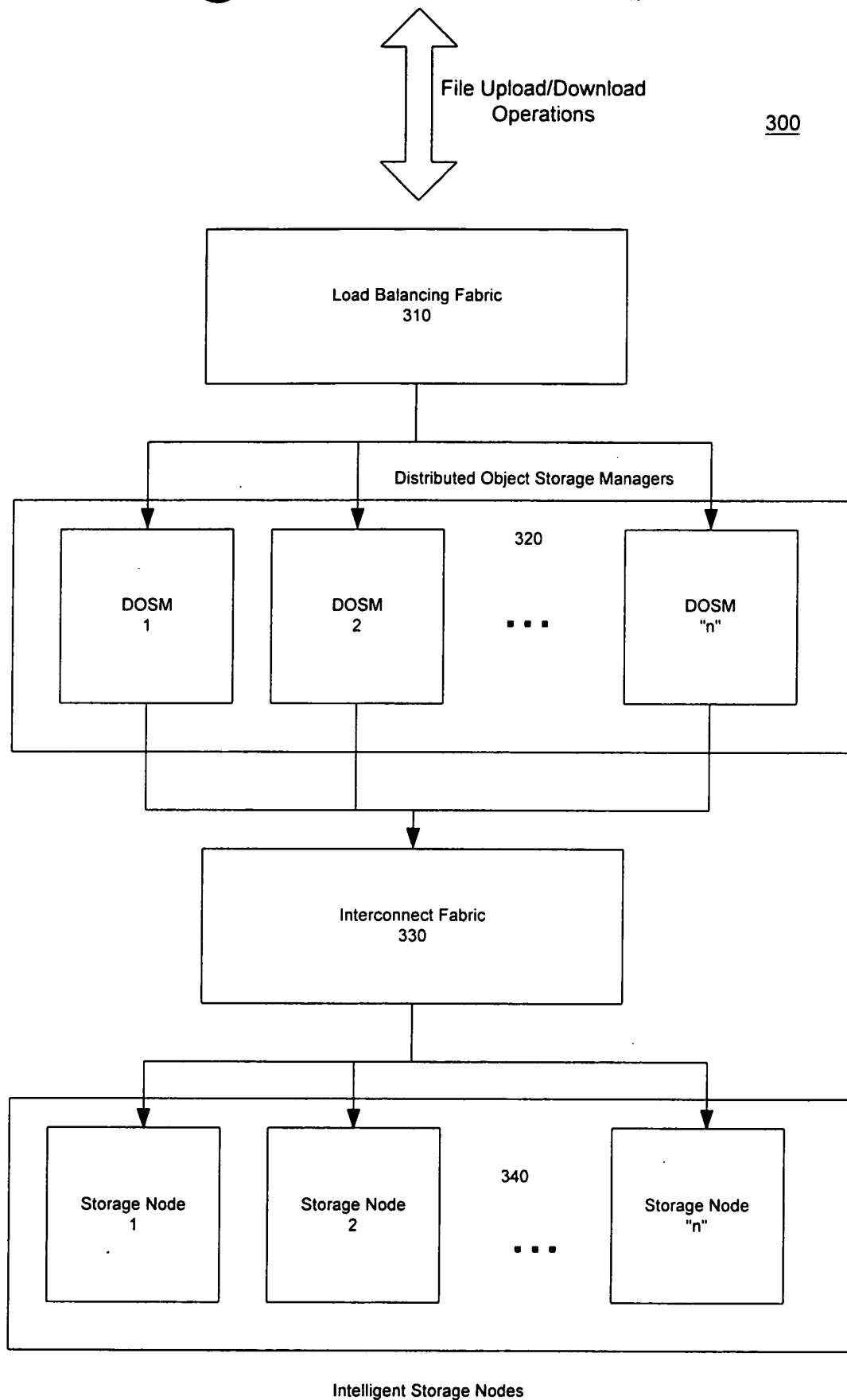


Figure 3

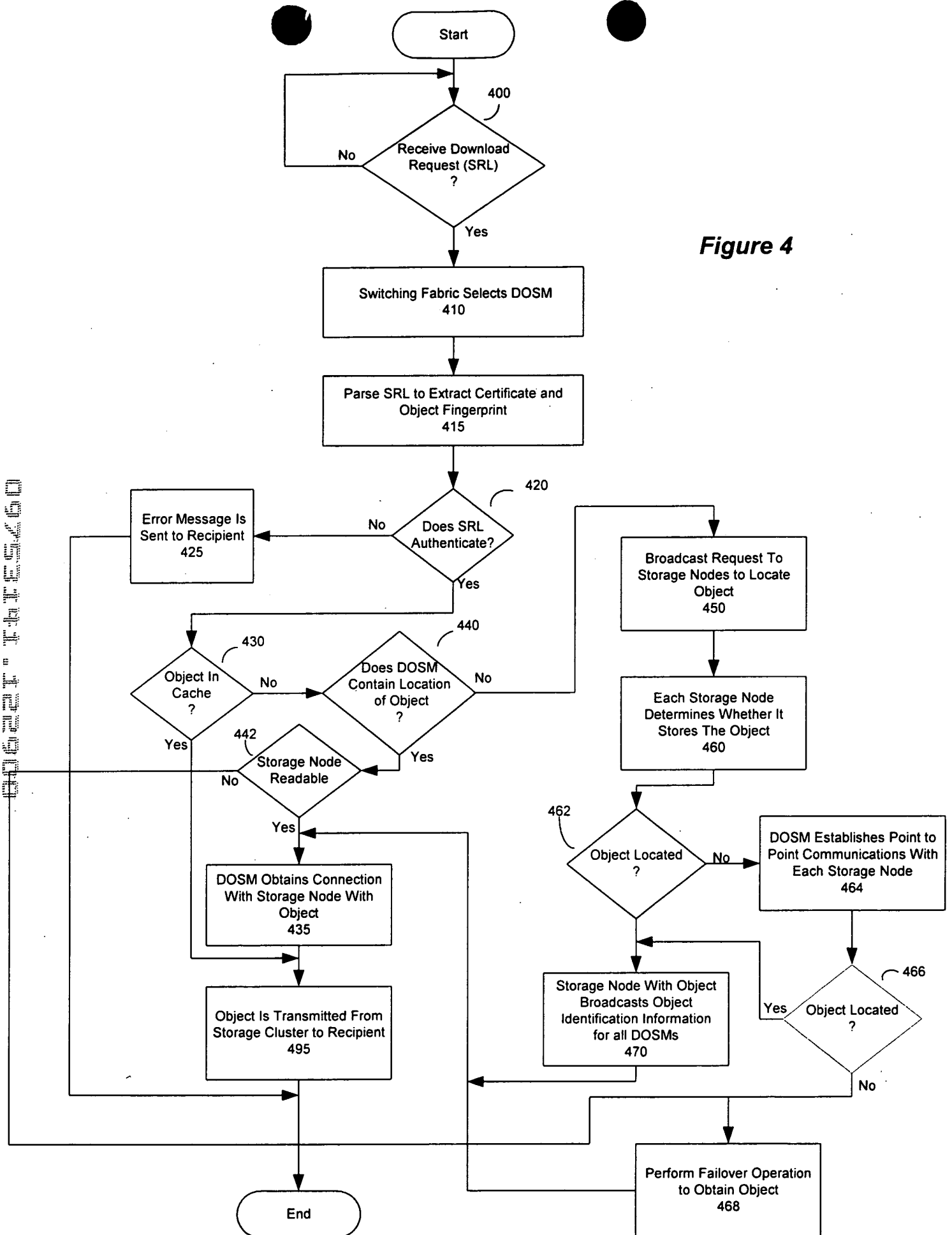


Figure 4

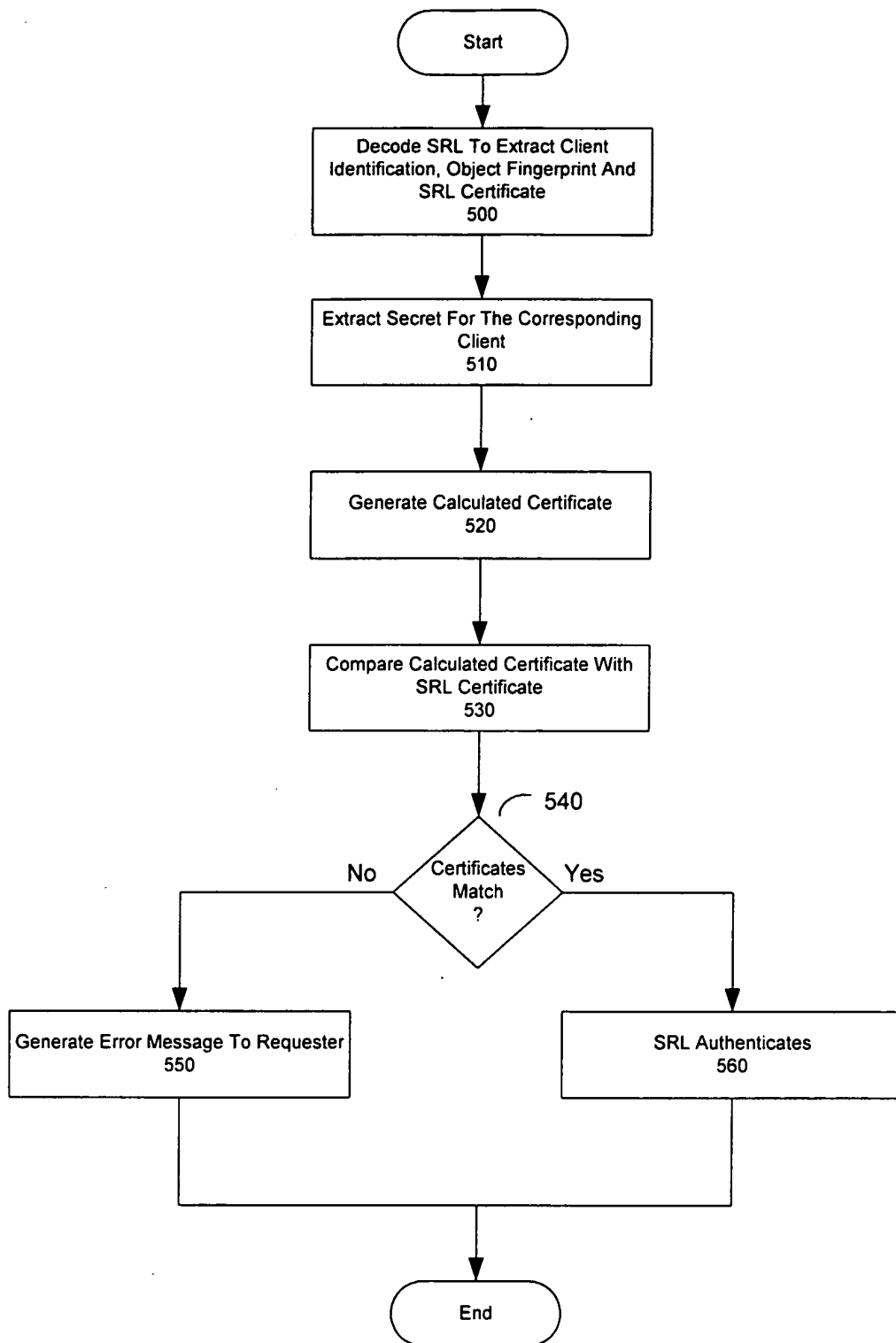
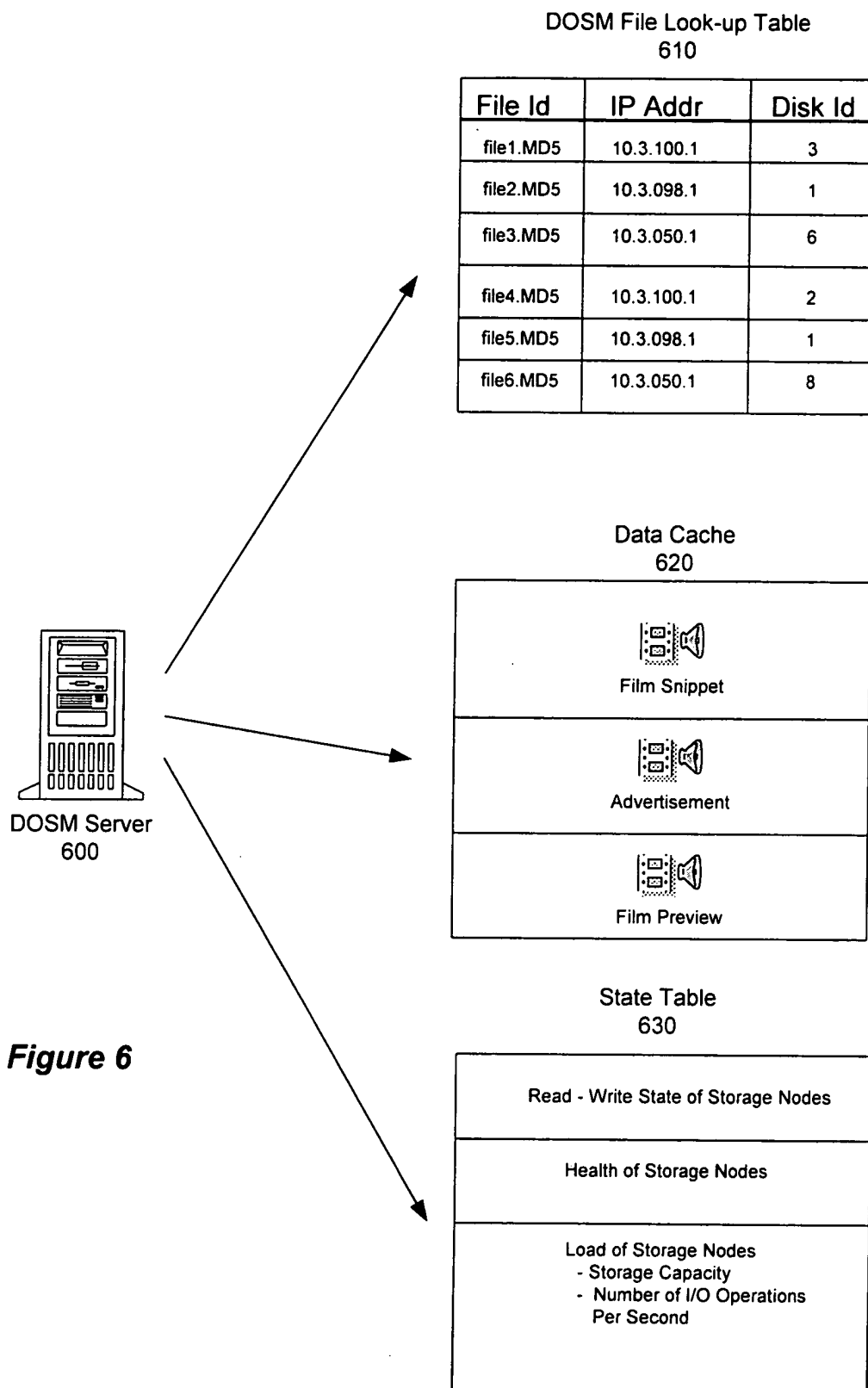


Figure 5



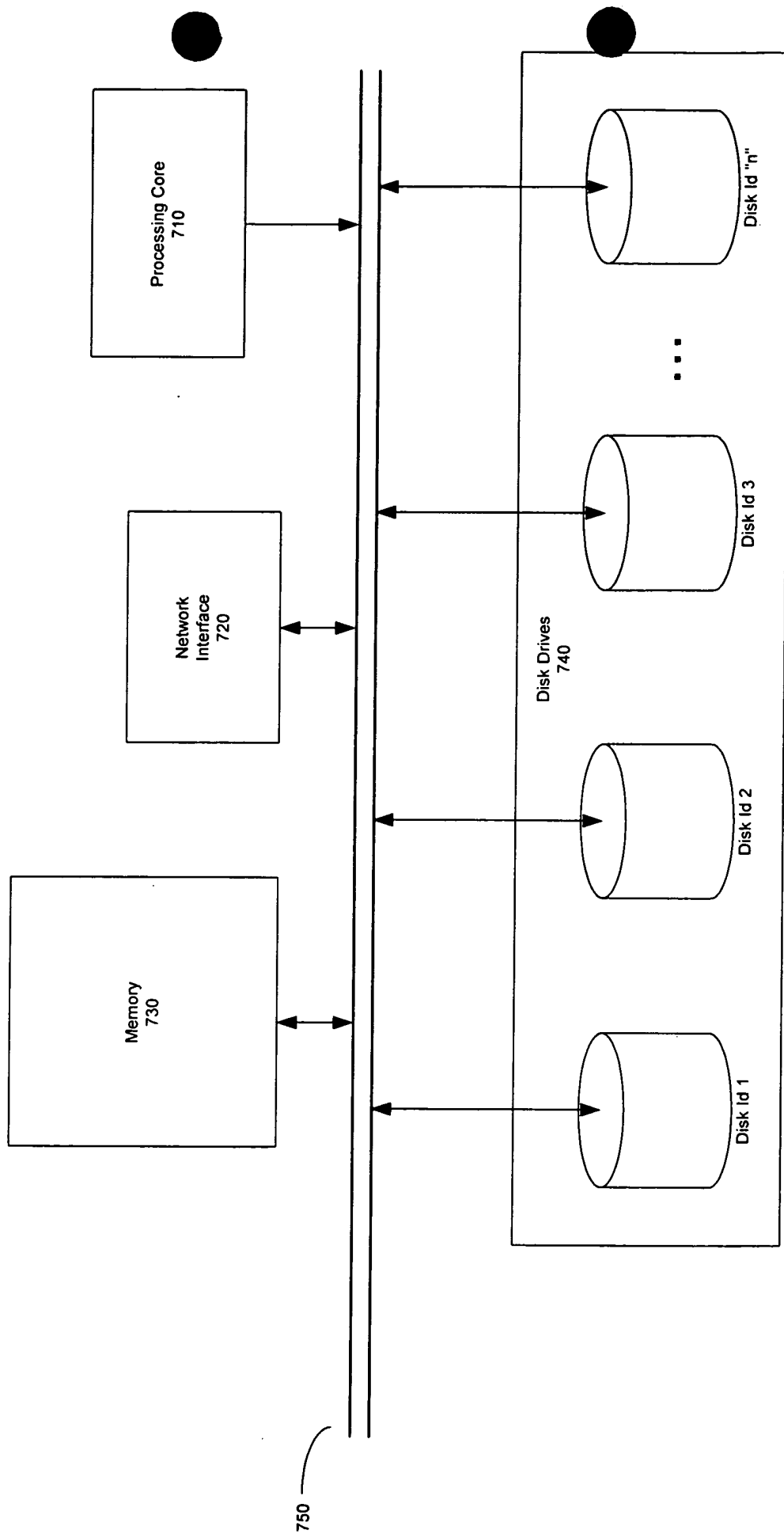


Figure 7

00753141.122900

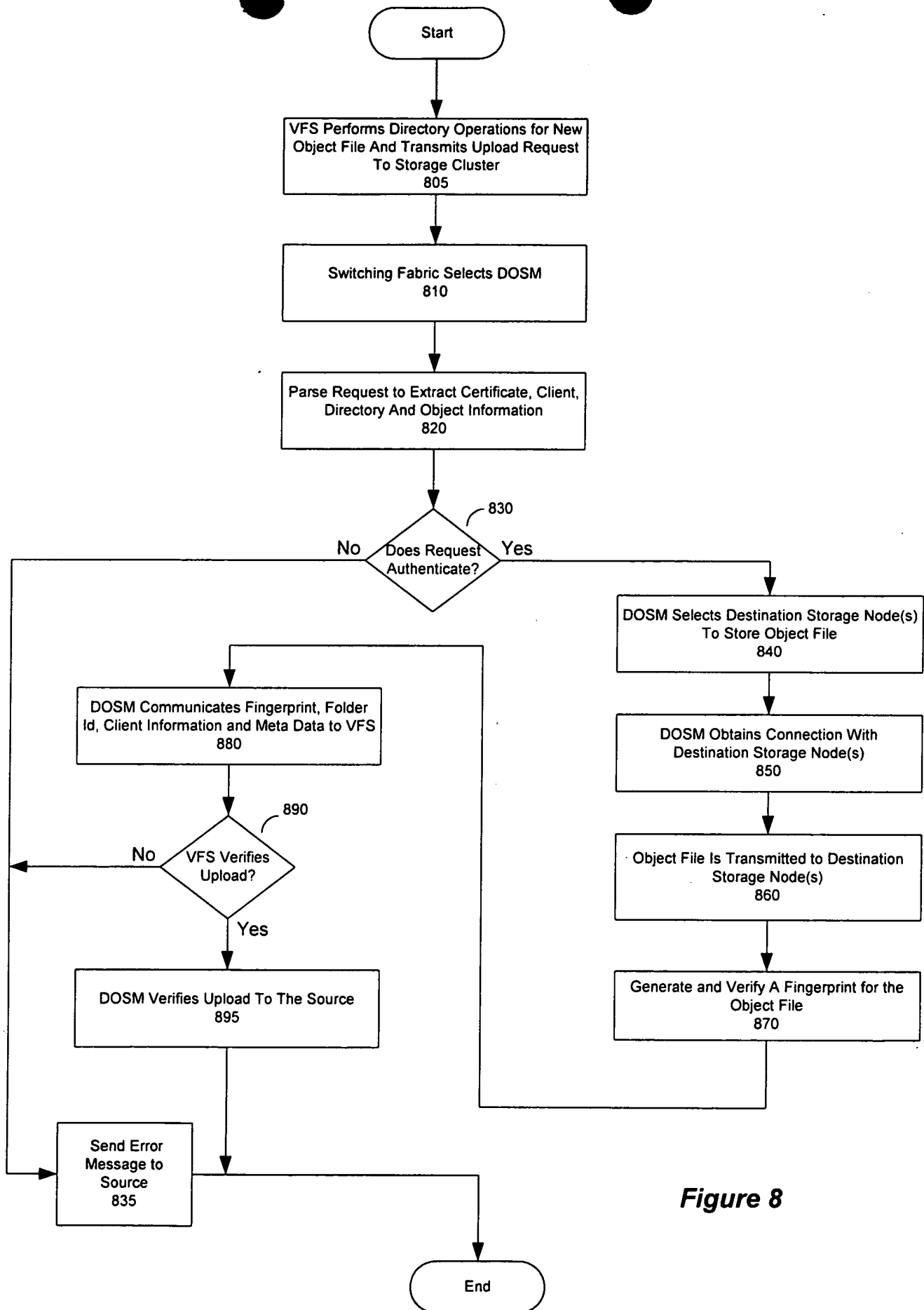


Figure 8

09753141-122900

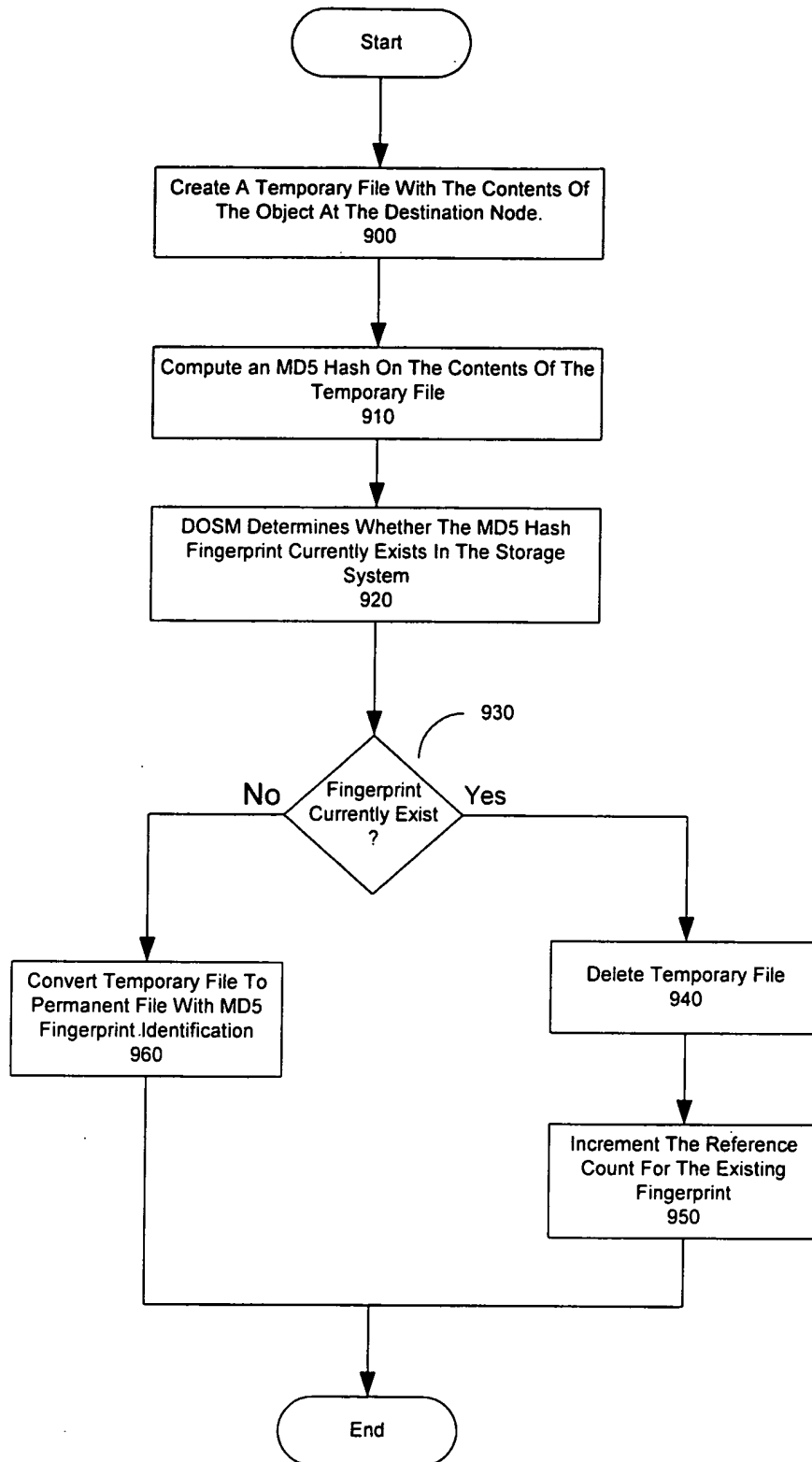


Figure 9

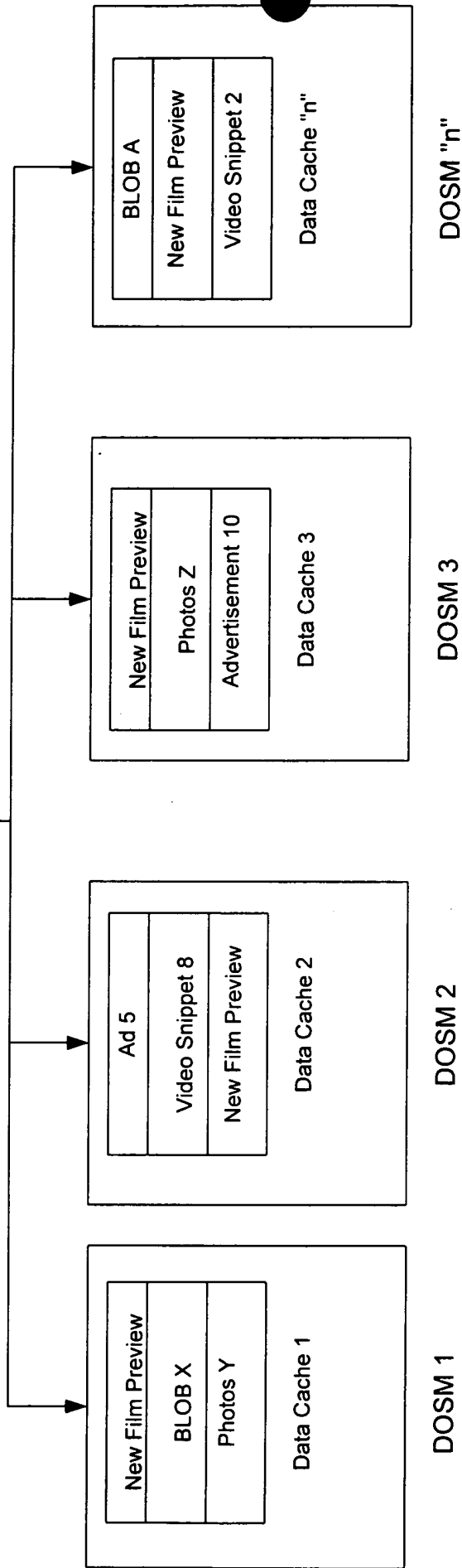
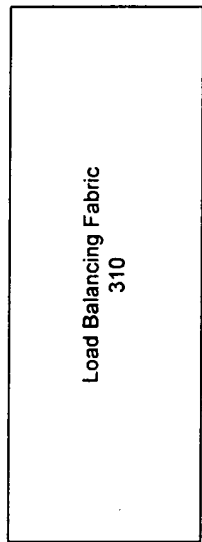
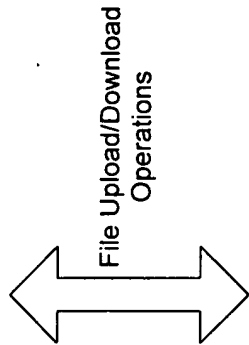


Figure 10

THE UNIVERSITY OF CHICAGO

1200

THE UNIVERSITY OF CHICAGO

1210

THE UNIVERSITY OF CHICAGO

1220

THE UNIVERSITY OF CHICAGO

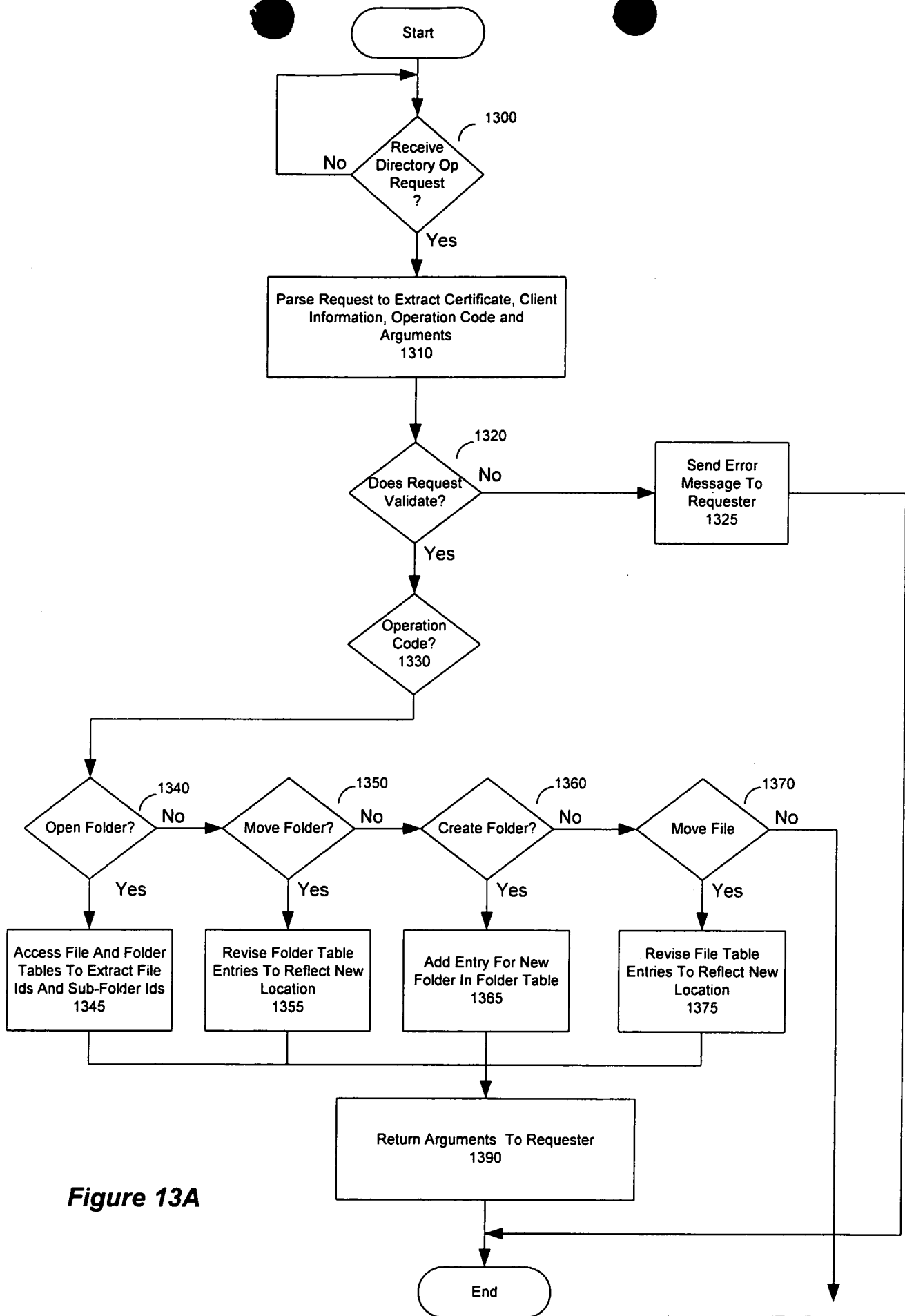


Figure 13A

(To Figure 13B)

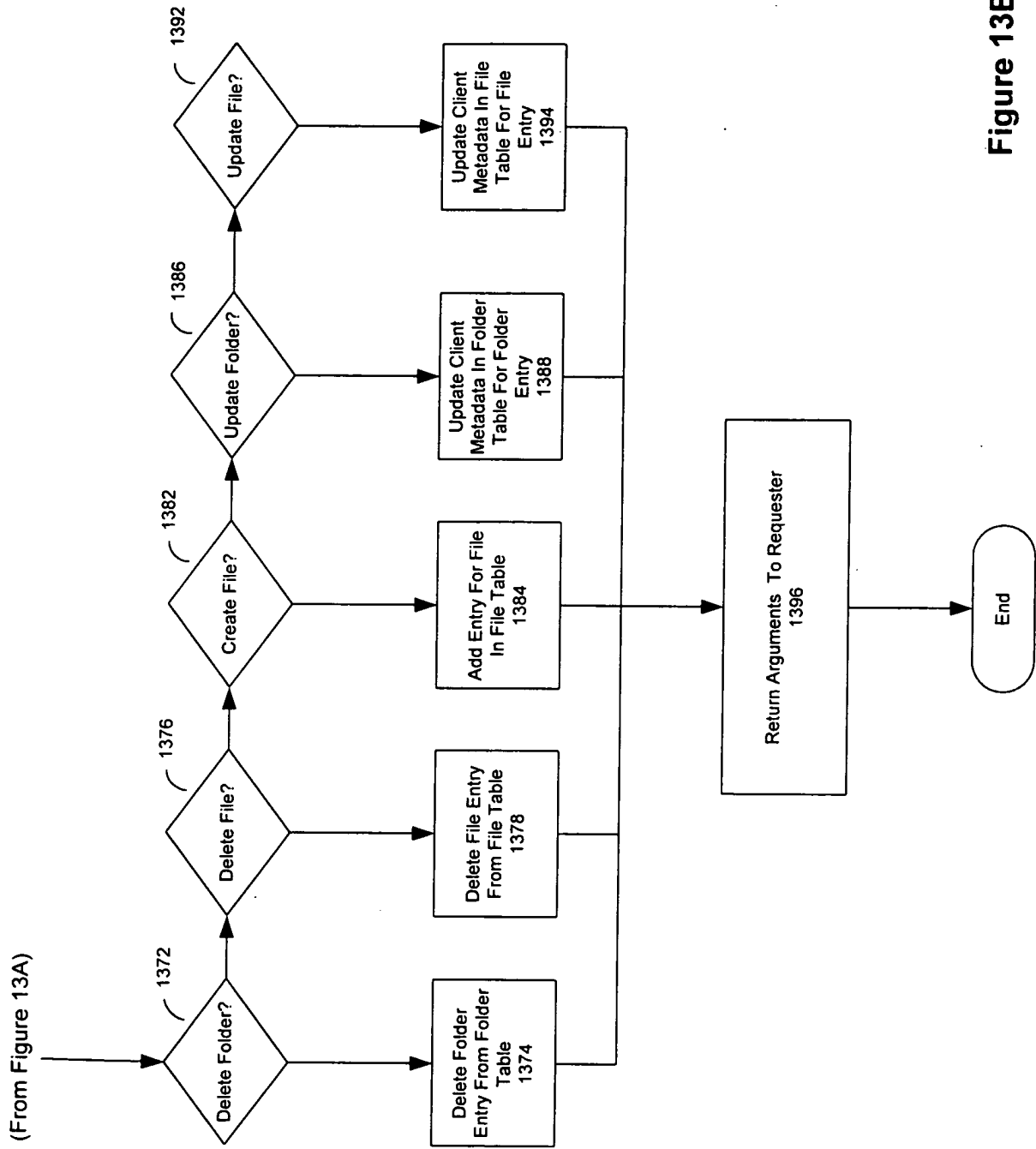


Figure 13B

09753141.123900

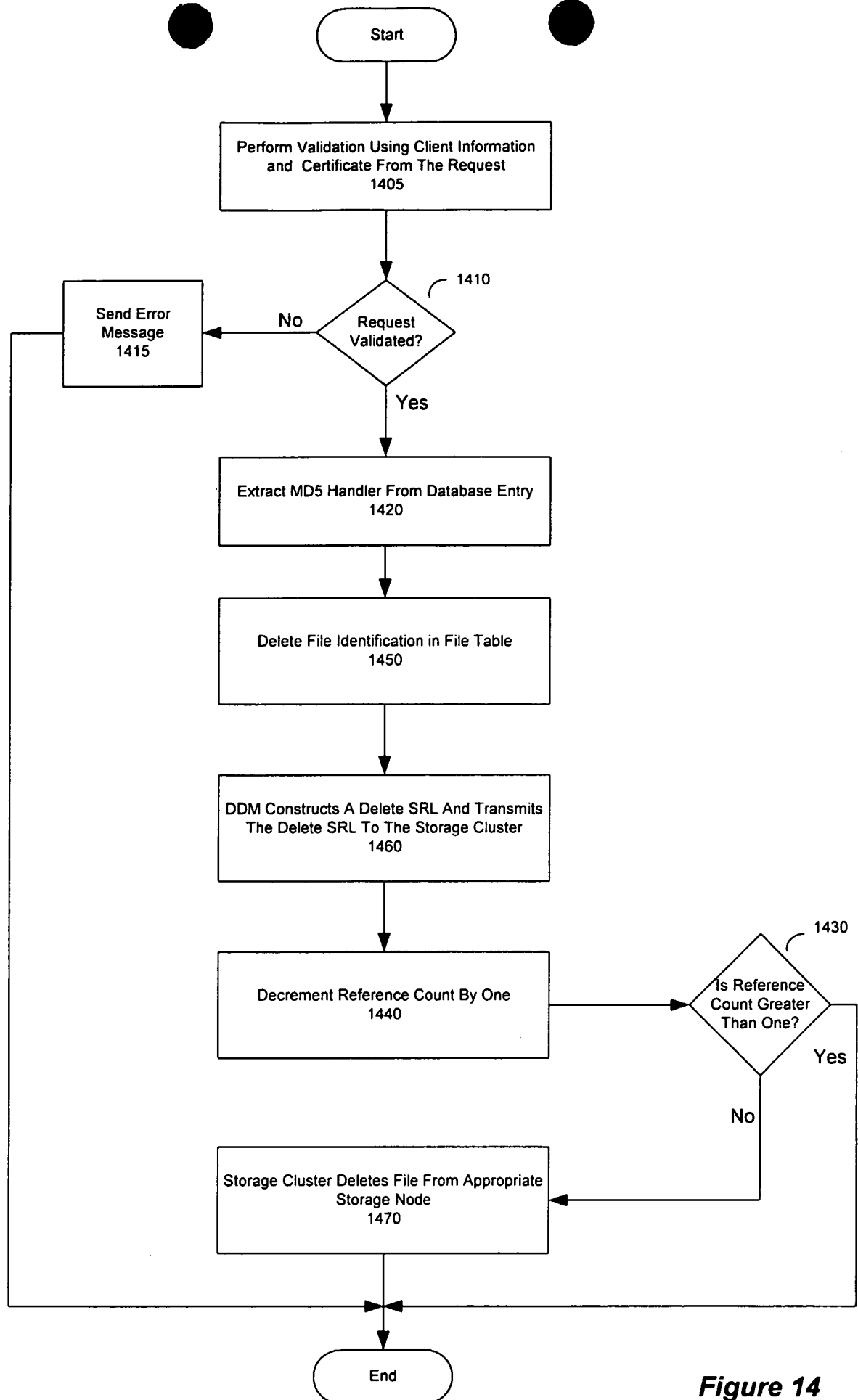


Figure 14

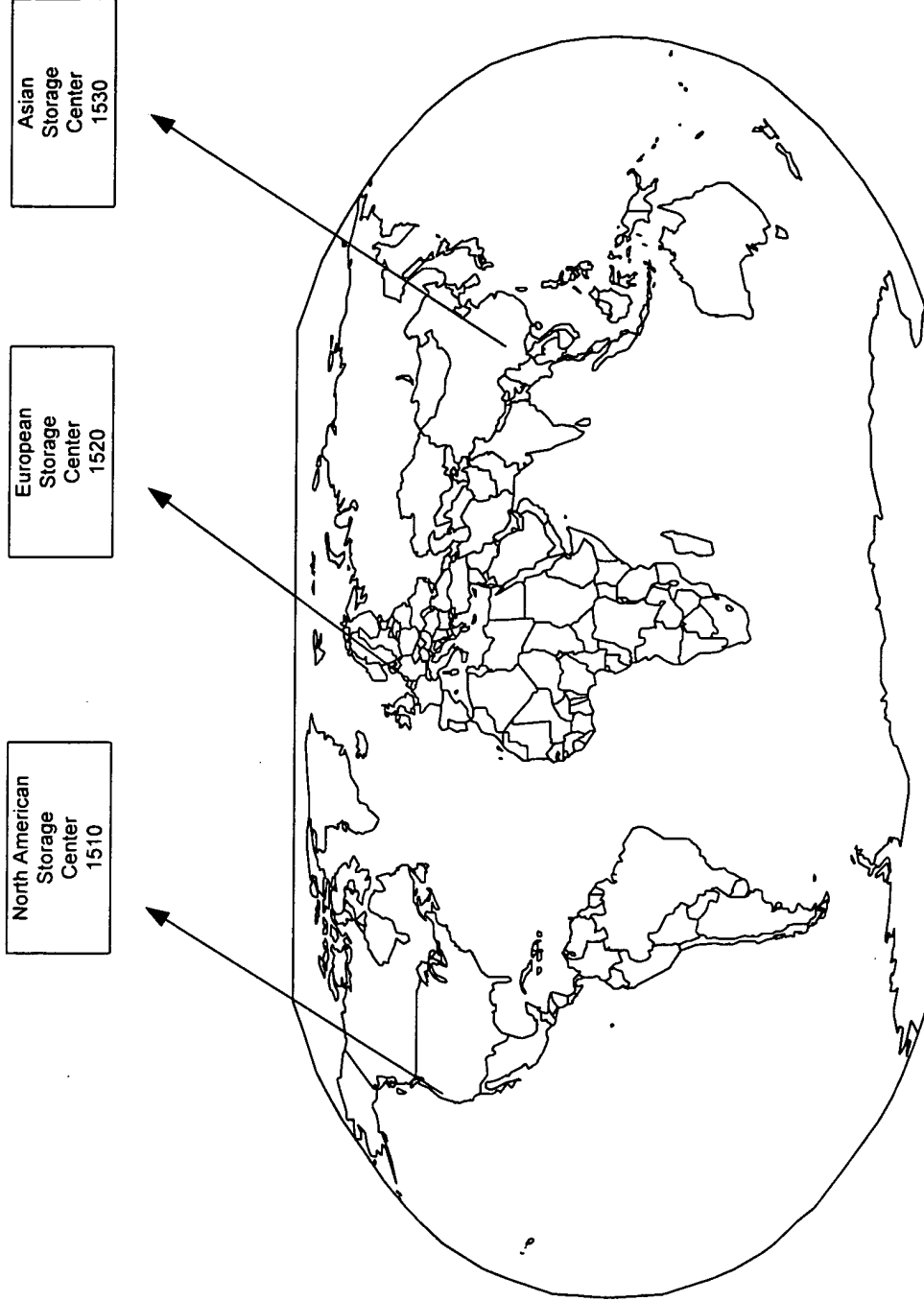


Figure 15

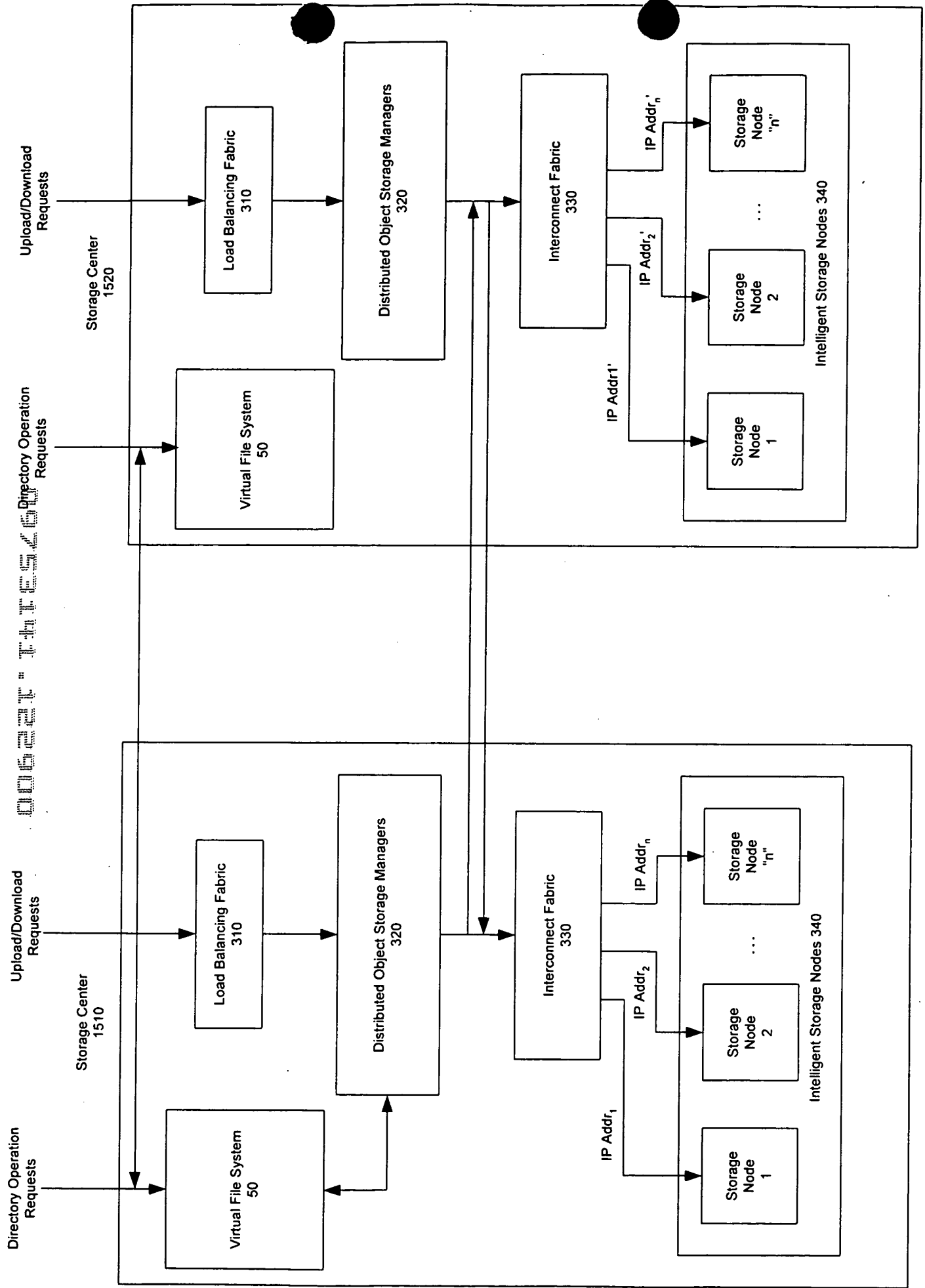


Figure 16

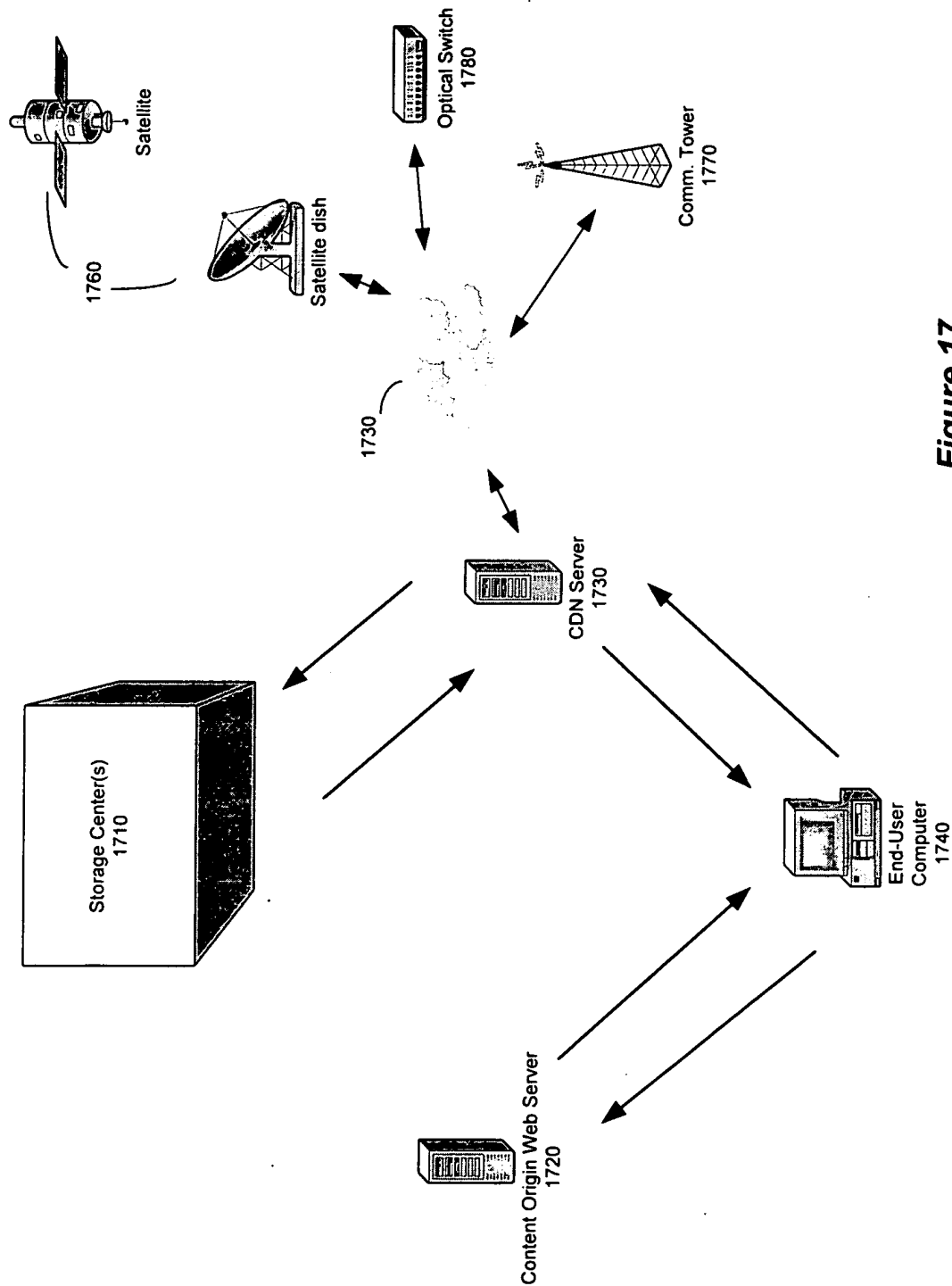


Figure 17

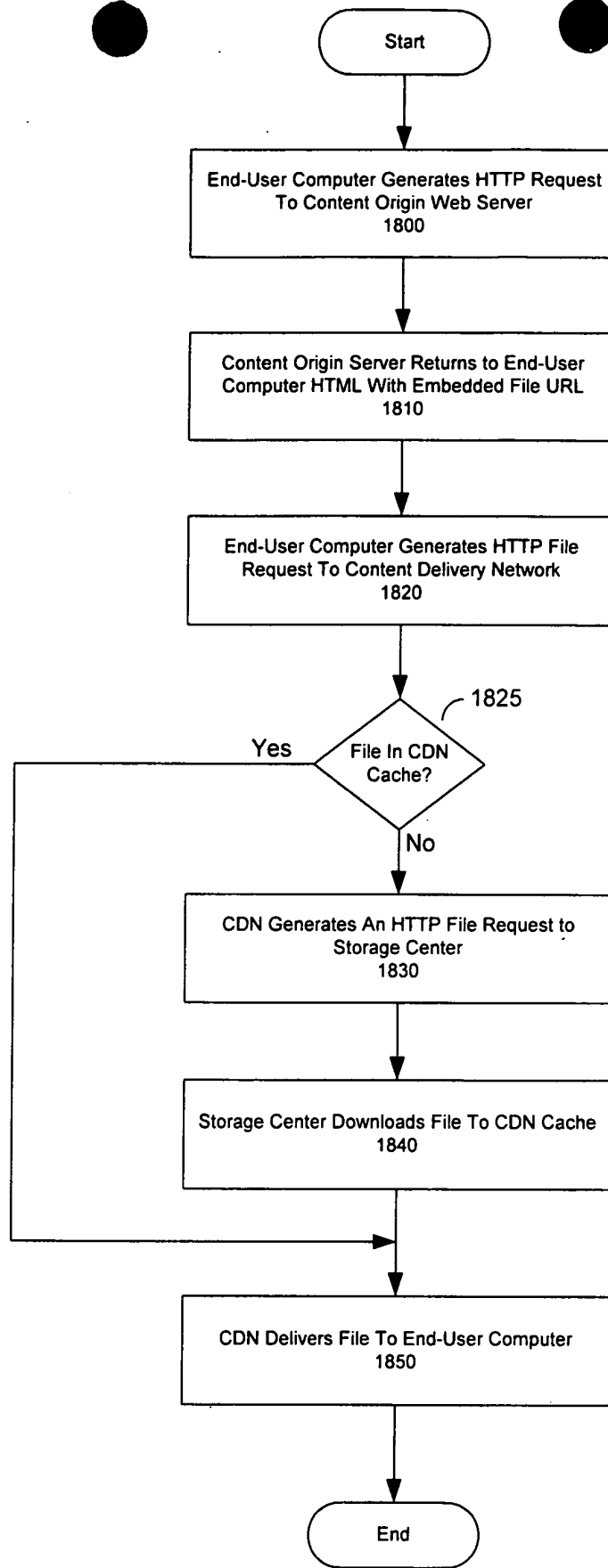


Figure 18

00522T-1300

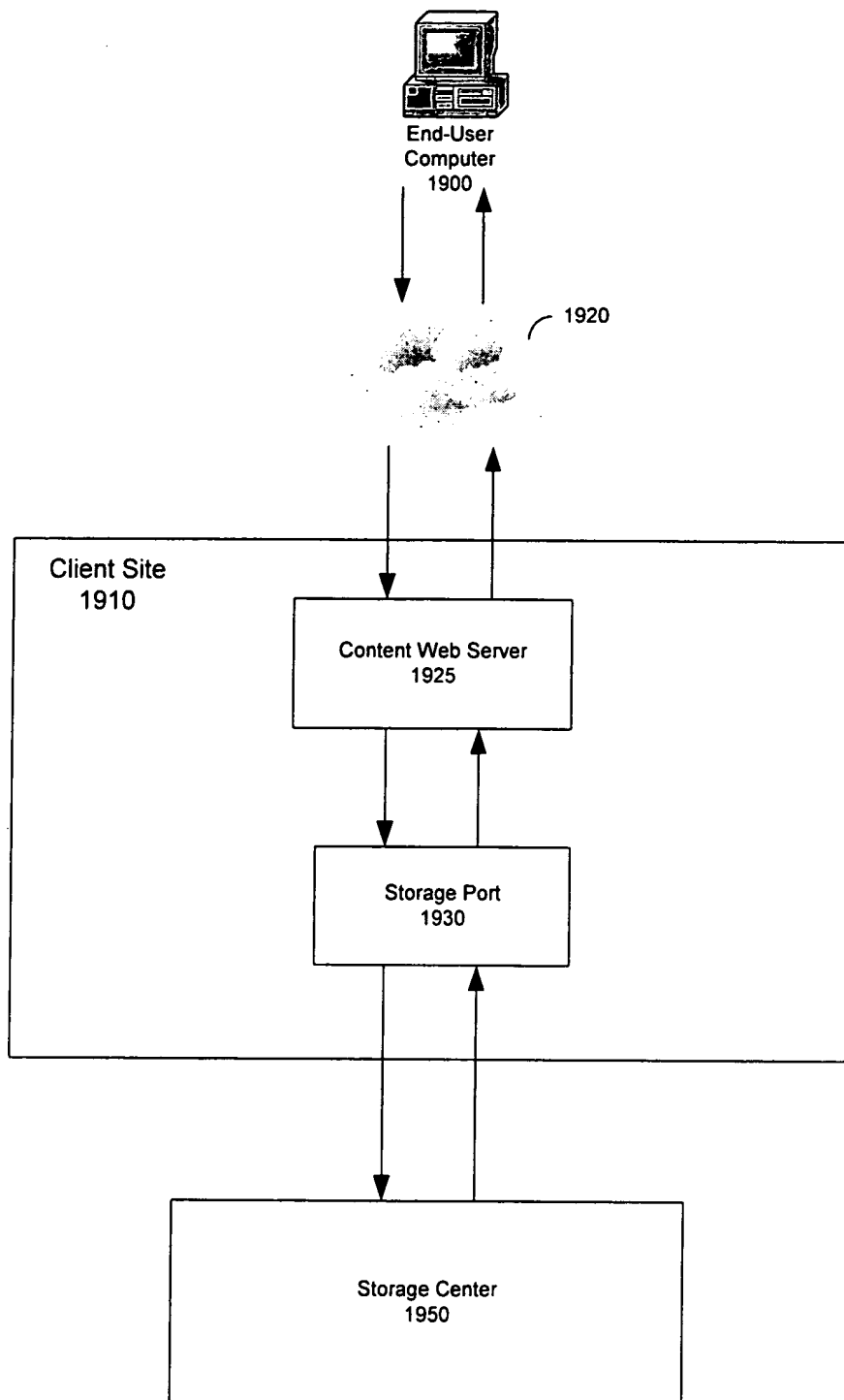


Figure 19

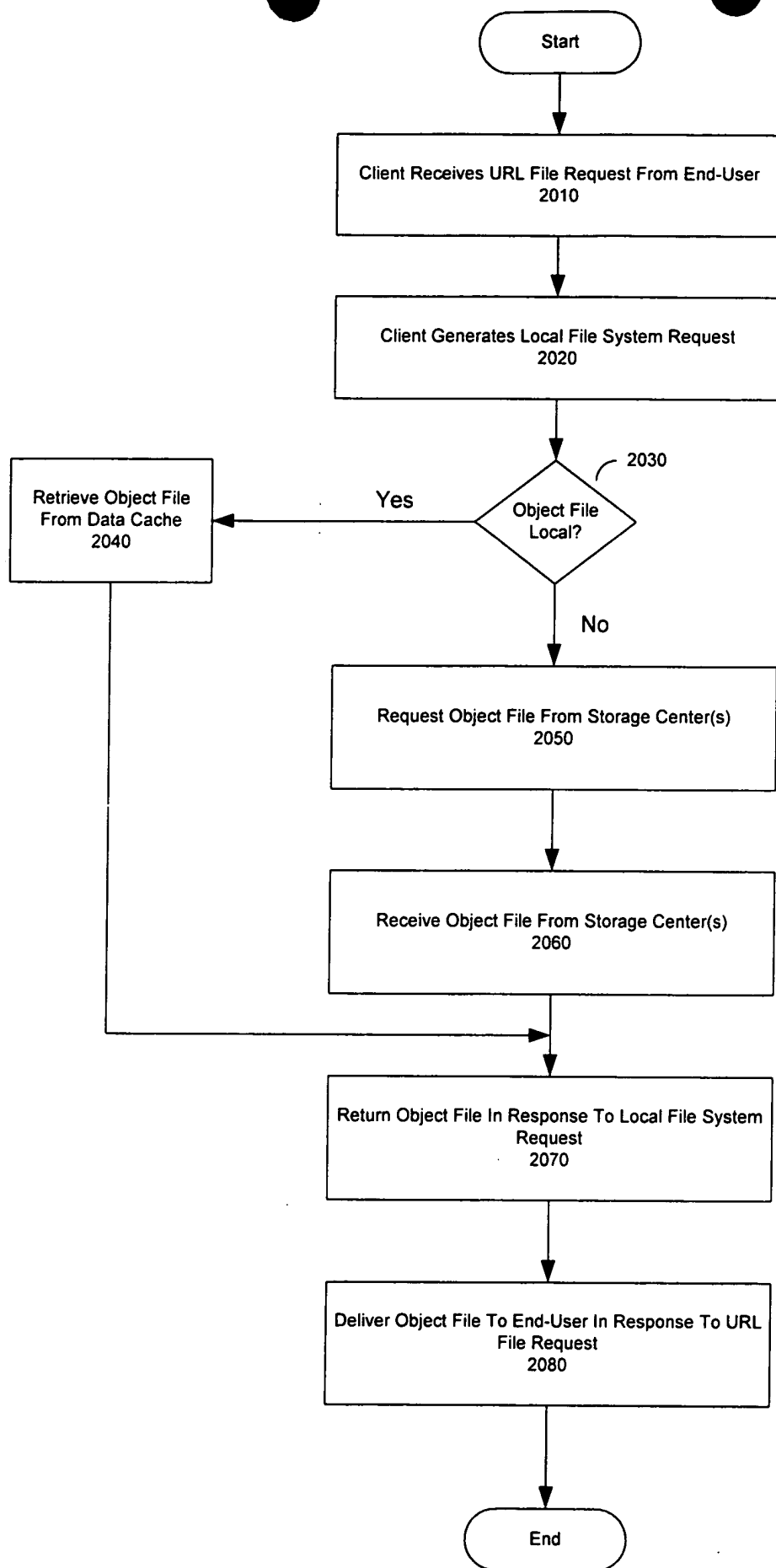


Figure 20

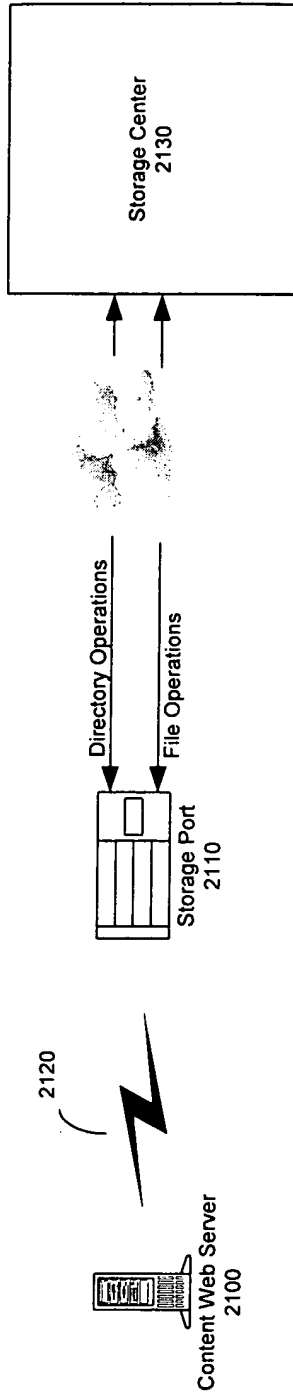


Figure 21a

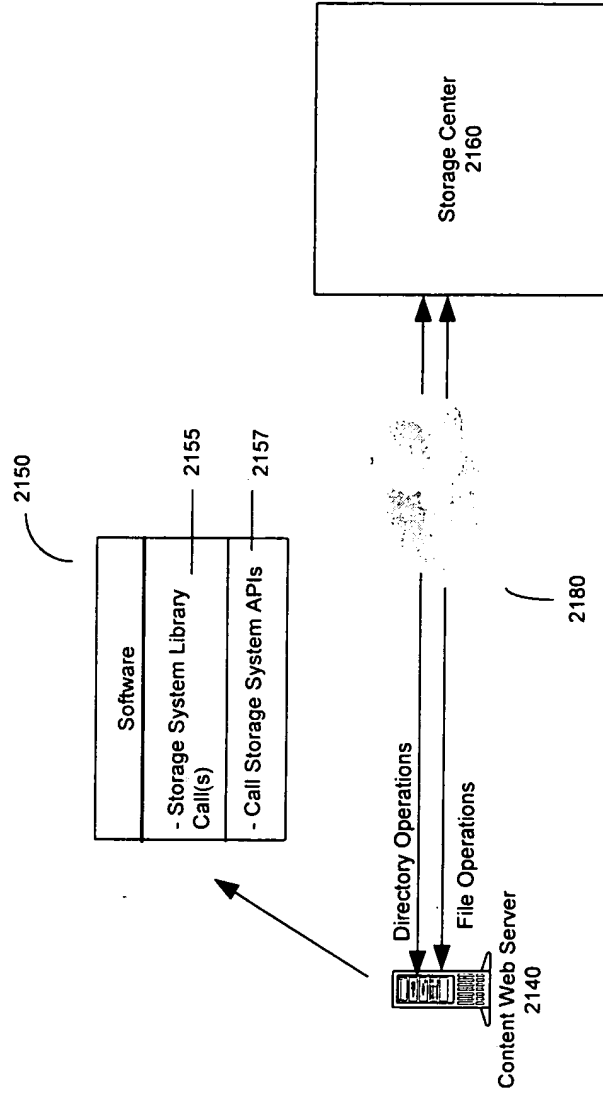


Figure 21b

Storage Port
2200

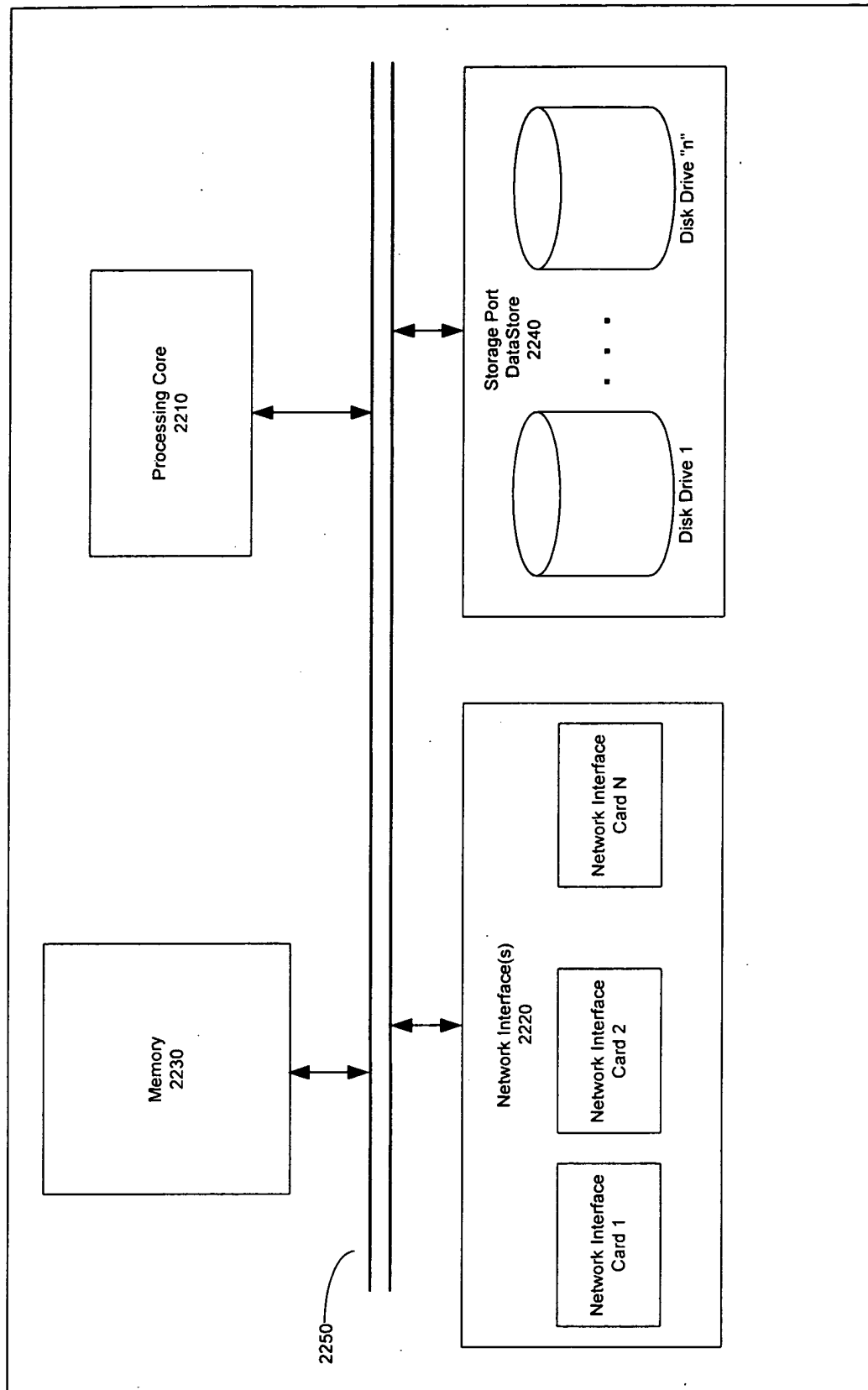


Figure 22

2300

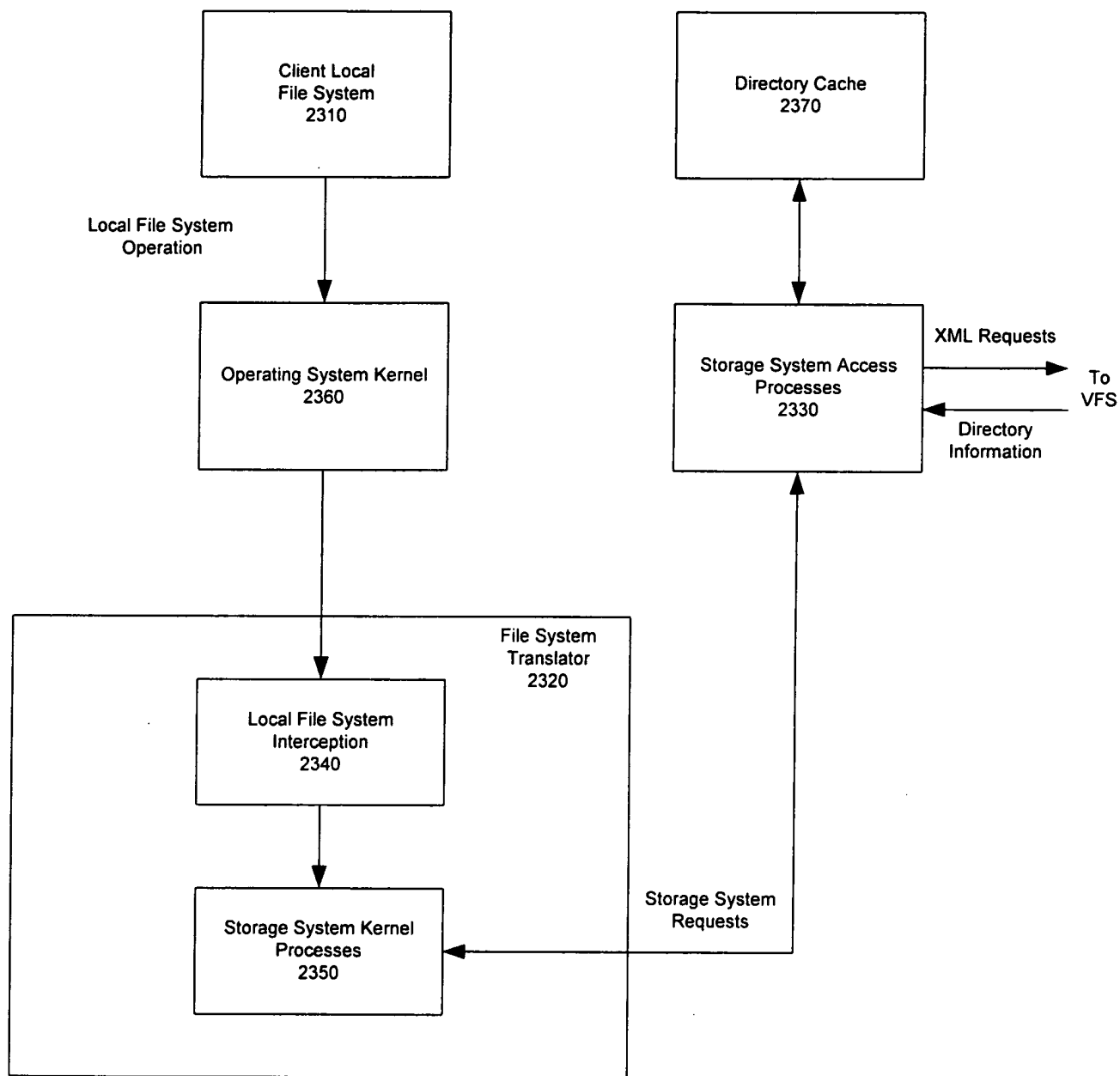


Figure 23

097441-1 6/2000

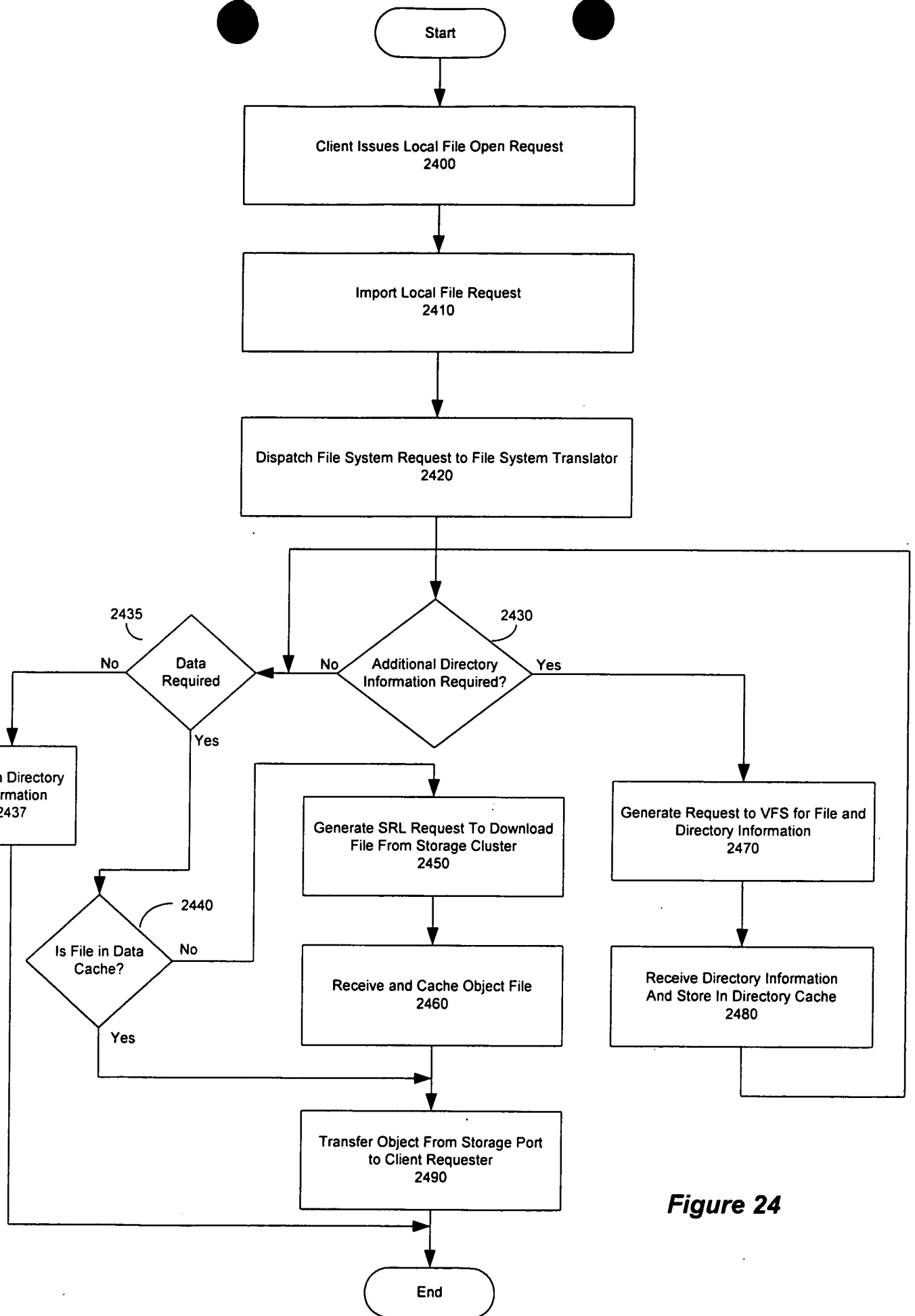


Figure 24

09753141.122900

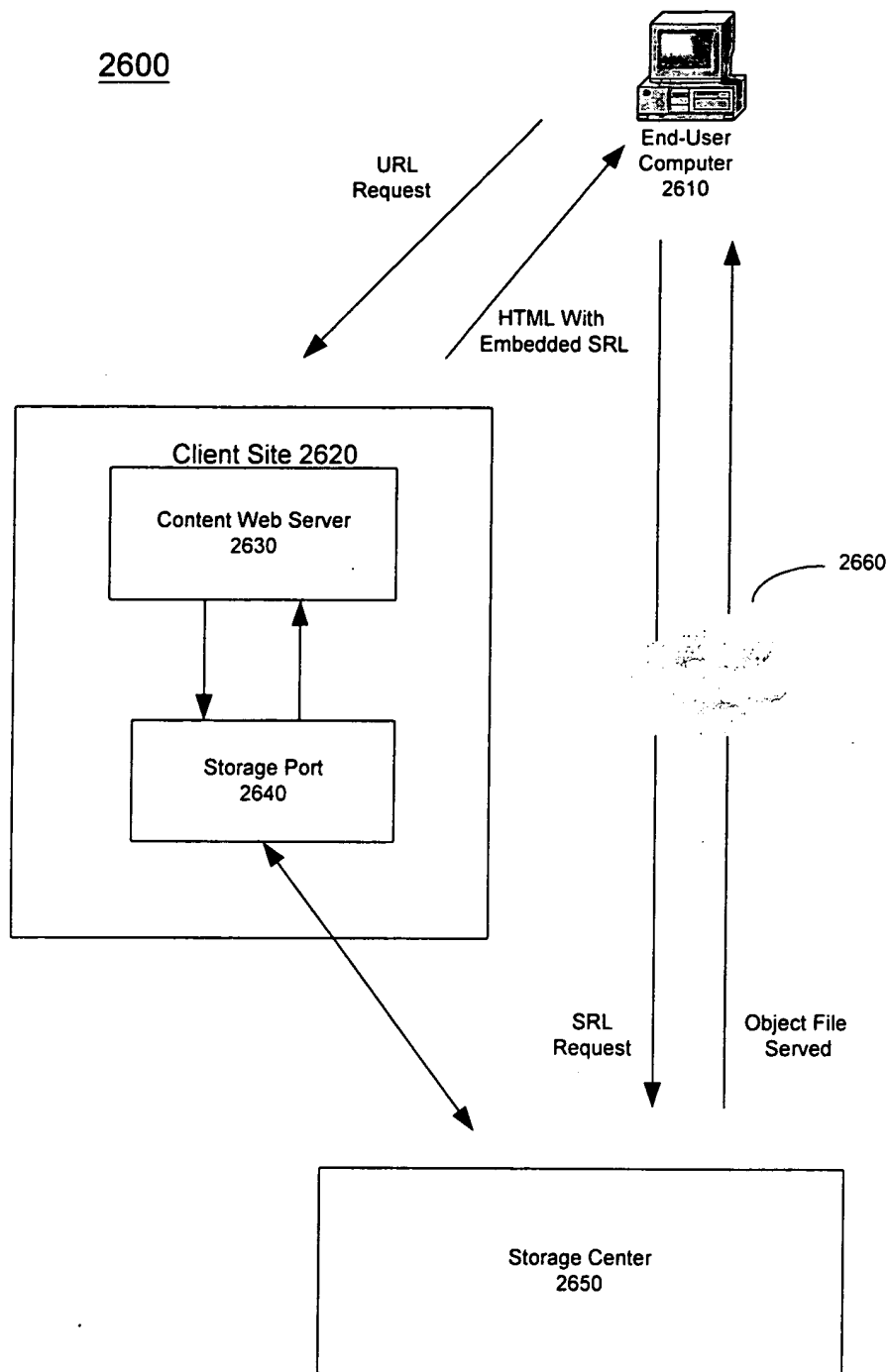


Figure 25

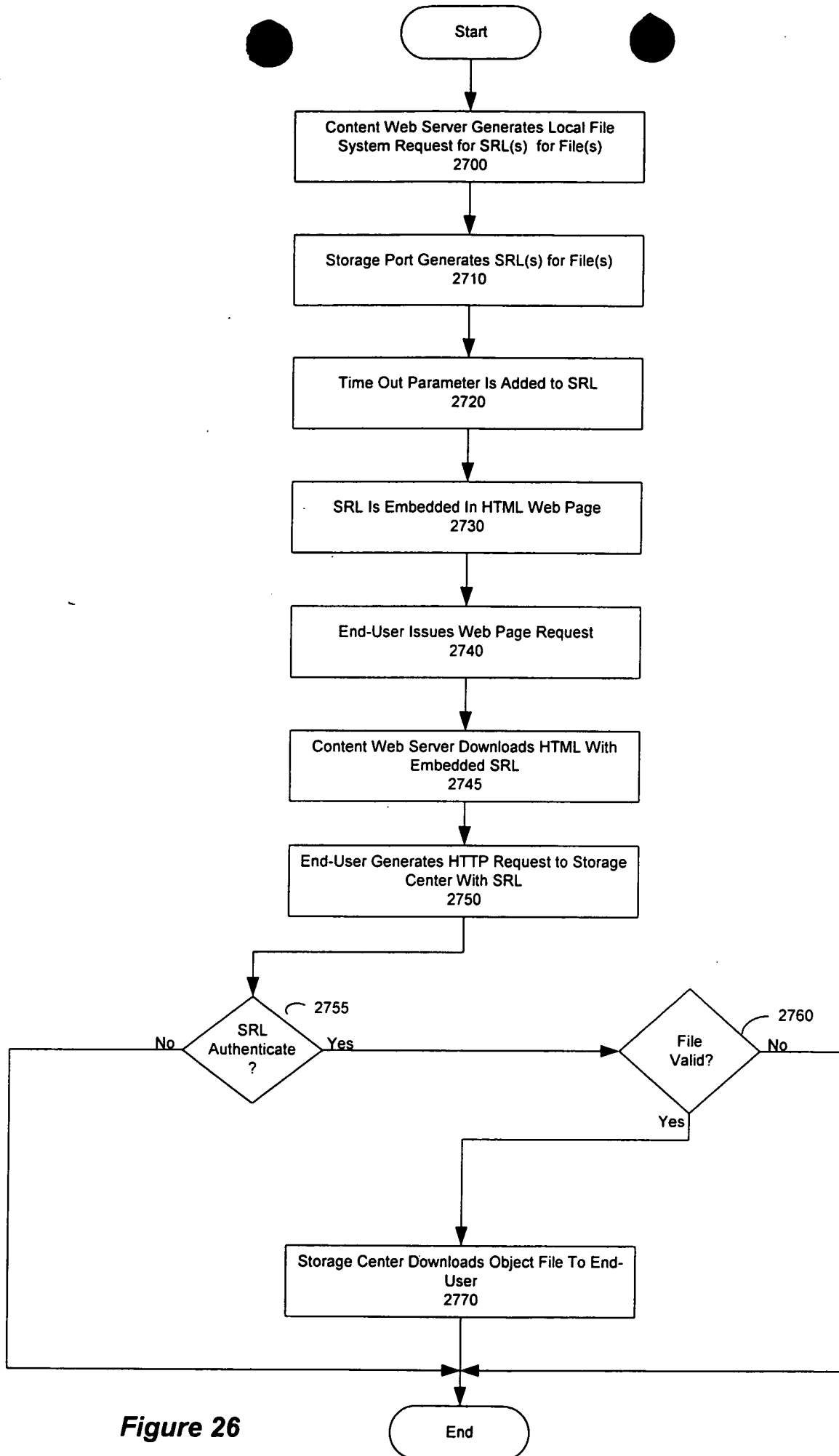


Figure 26

0953141-126900

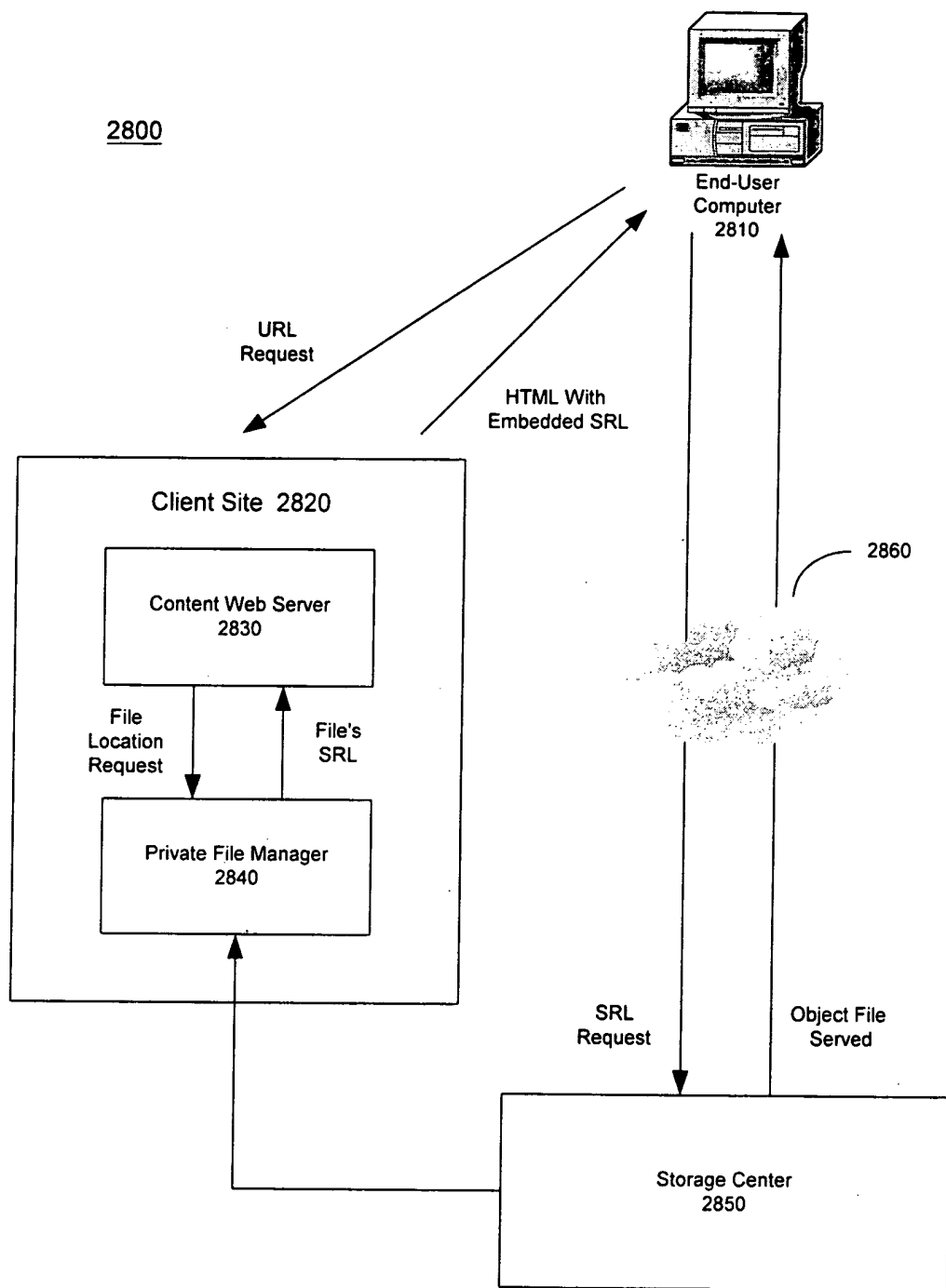


Figure 27

09753141.122500

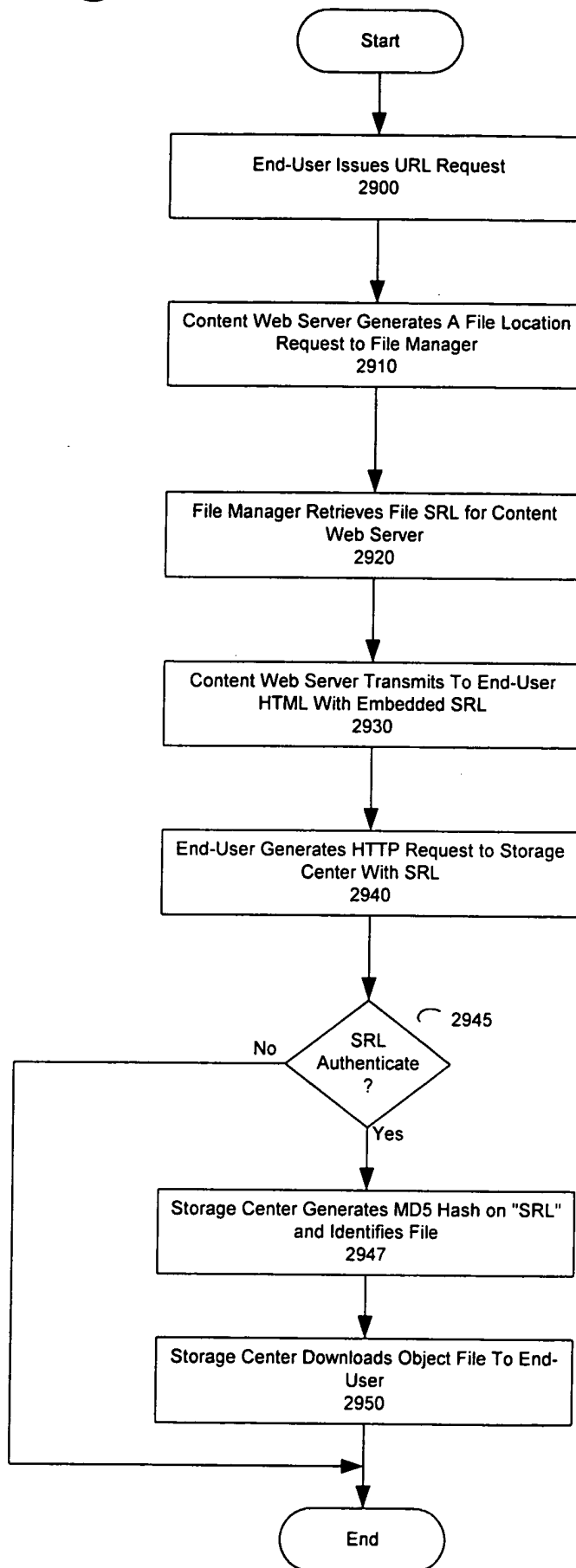


Figure 28

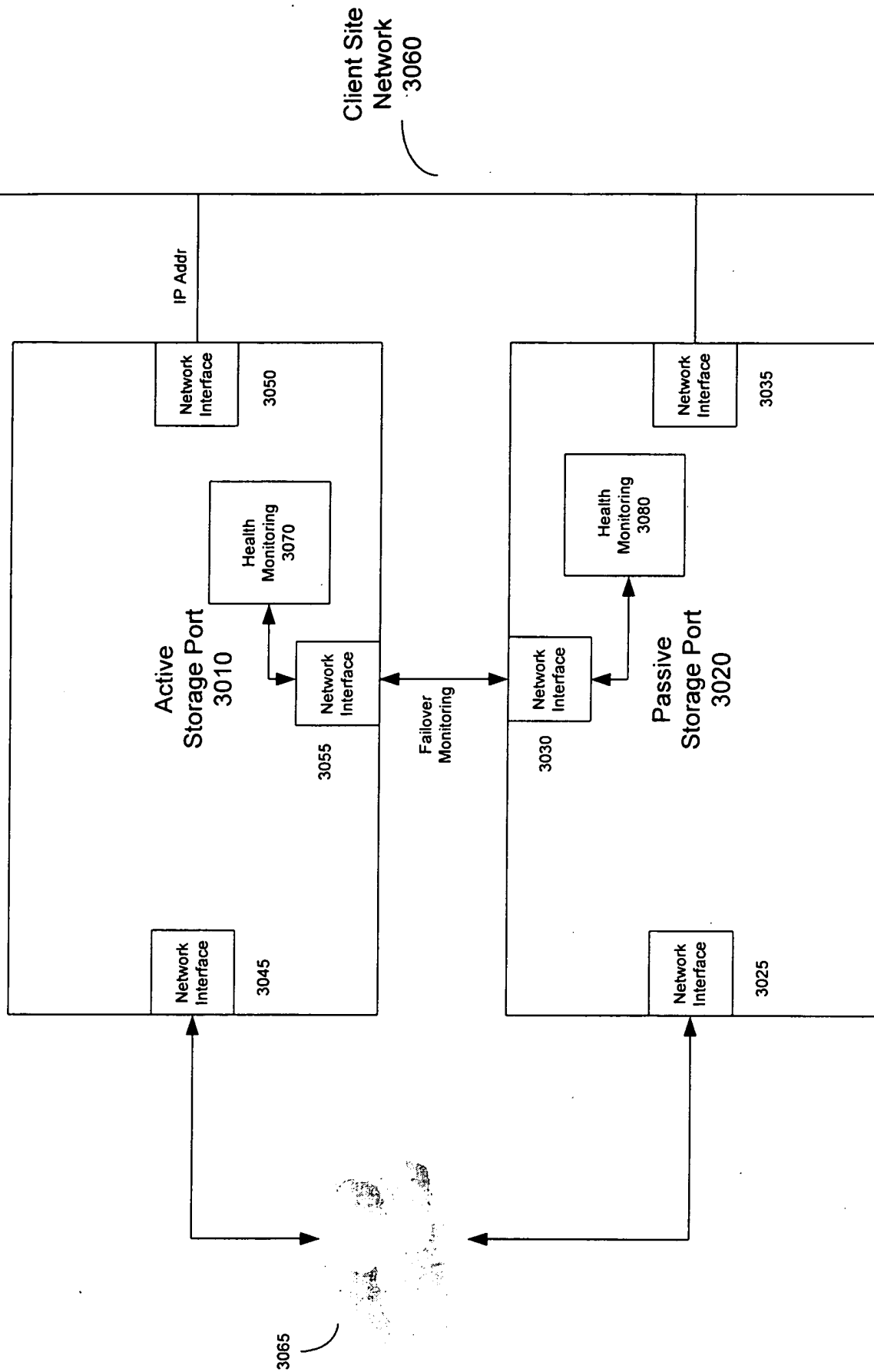


Figure 29

09/53/44-12900

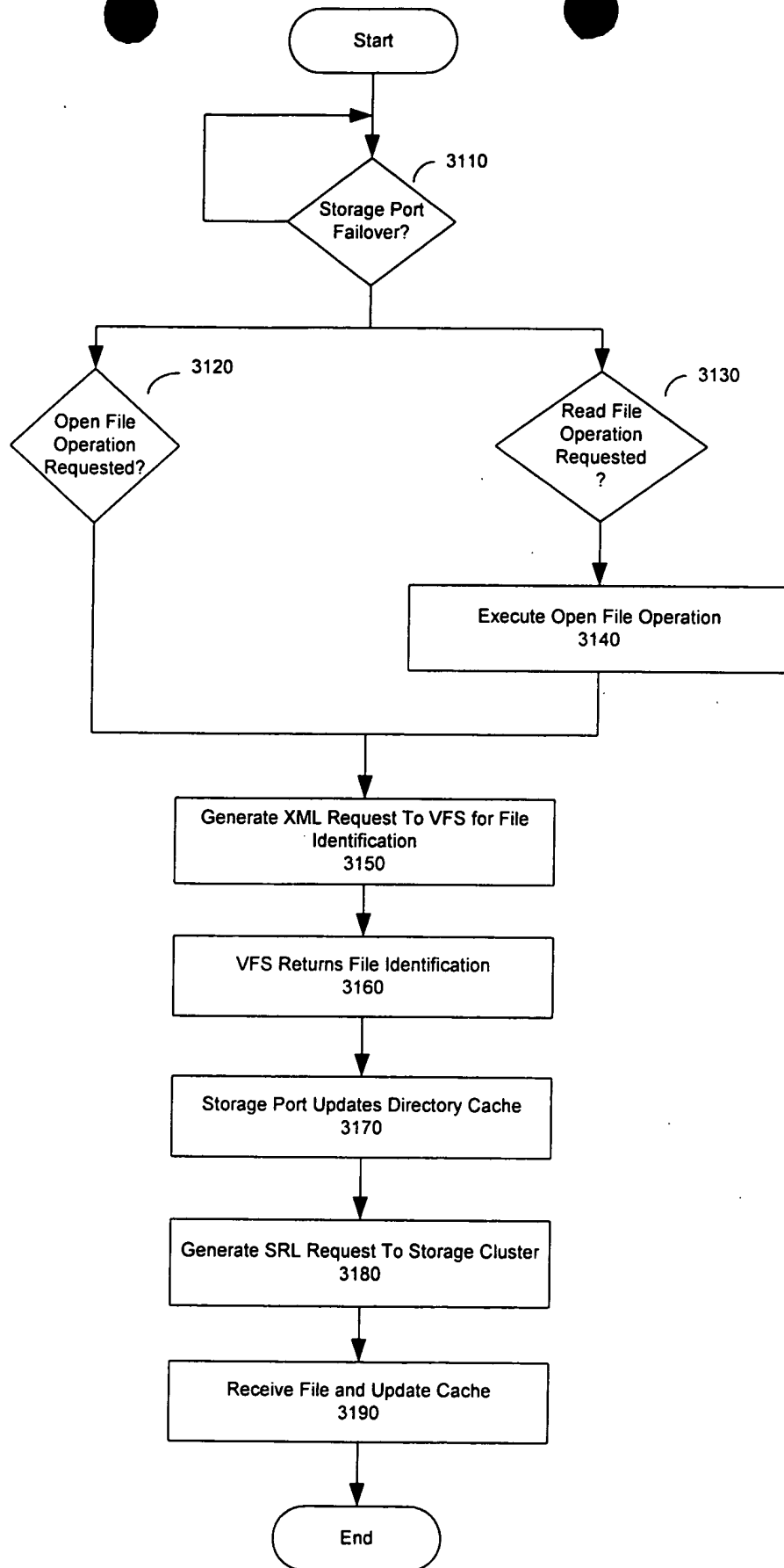



Figure 30

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graph TD
    Start([Start]) --> 3210{Storage Node Fails?}
    3210 --> 3220[DOSMs Updates State Table For Storage Node Failover 3220]
    3220 --> 3225{File Requested?}
    3225 -- No --> 3225
    3225 -- Yes --> 3230[DOSM Issues Multi-cast Protocol Request To Storage Nodes 3230]
    3230 --> 3240[Each Storage Node Determines Whether It Contains The Requested File 3240]
    3240 --> 3245{Object File Located?}
    3245 -- No --> 3247[DOSM Selects Different Storage Center 3247]
    3247 --> 3210
    3245 -- Yes --> 3250[Storage Node With File Broadcasts File Identification Information 3250]
    3250 --> 3260[DOSM Snoops, Through Multi-Cast Protocol, To Update File Information 3260]
    3260 --> End([End])

```

Figure 31



End